

Film and Dropwise Condensation Unit (EDC-HT-009)

EXPERIMENTAL DATA:

- Film and Drop-wise condensation.
- Study of heat transfer coefficient.



DESCRIPTION:

When steam comes in contact with a medium with lower temperature than its saturation temperature for the current pressure of steam condensation occurs, usually known as film condensation. Cooling surface is very smooth and badly wettable then the condensation is dropwise. Apparatus contains two tubular shaped water-cooled condensers made of different material for different condensation.

Optional Software is available for Data Acquisition and Control Function.

SPECIFICATIONS:

- Transparent cylinder condensation process.
- Water cooled tubes condenser for film and dropwise condensation.
- Digital Display.

TECHNICAL DATA:

- Heater with adjustable power:
 - o Power: 0 to 3kW.
- Condenser:
 - o 1 x tube Copper surface.
 - o 1 x tube SS Surface.
- Cylinder:
 - Transparent High pressure operated Glass.
 - o Diameter: 200mm.
 - o Height: 450mm.
- Pressure Safety at 3 bars.
- Flow: 6 L/m max.
- Temperature: 0 to 150° C.
- Digital temperature, pressure and flow sensor.
- Built-in pump with storage tank for water circulation.
- 230V AC 50Hz.

DIMENSIONS AND WEIGHT:

- L x W x H (mm): 1000 X 800 X 1000 approx.
- Weight: 60 kg approx.

SCOPE OF DELIVERY:

- 1 x EDC-HT-009.
- 1 x Instructional Manual.

